Abstract of the Disclosure:

5

10

15

20

The invention relates to a control unit for activating an occupant protection means in a motor vehicle and to a method for monitoring the proper functioning of a control unit preferably of this type. To this end, the control unit comprises a first and a second arithmetic unit (R1, R2) as well as an activating unit (AE). A number of logical AND gates (AND1, AND2; AND3) are connected on the input side to the clock signals (clk1, clk2, clk3) of the arithmetic units (R1, R2) respectively assigned thereto or to the activating unit (AE). The signal output of each logical AND gate (AND1, AND2; AND3) is fed to a respectively assigned pulse count comparator unit (PZVE1, PZVE2) whose respective signal output is, in turn, connected to an input of a respectively assigned resetter (RES1, RES2). A resetter (RES1, RES2) of each arithmetic unit (R1, R2) always resets the respective other arithmetic unit (R1, R2) when the pulse count comparator unit (PZVE1, PZVE2) respectively assigned thereto detects an inadmissible number of pulses per unit of time in the output signal (clk13, clk23, clk23) of the respective AND gate (AND1, AND2; AND3).